Sierra Nevada Conservancy Grant Program Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Act of 2006 (Proposition 84)

Subregion: NORTH CENTRAL County: PLUMAS

Applicant: FEATHER RIVER COLLEGE HATCHERY

Project Title: FEATHER RIVER COLLEGE HATCHERY – SITE IMPROVEMENT PROJECT

Reference Number: SNC 070253

PROJECT SCOPE

The Feather River College Hatchery site improvement project would allow for expanded hatchery operations through installation of a new wastewater treatment system utilizing cutting-edge technology. Improvements to the existing aquaculture system will:

- Reduce current wastewater discharge into the adjacent stream (Spanish Creek, a tributary to the Feather River) by 5,808 gallons per day;
- Deliver a consistent production of high-quality fish that will provide for increased education and recreation activities;
- Protect, conserve, and sustain populations of native species such as brown and rainbow trout, and increase the production and supply of these species to organizations such as Kokanee Power and Trout Unlimited in order to provide for recreational fishing opportunities, while supplementing the species' natural numbers.

Steps critical to a successful project include:

- Completion of aquaculture consultant's analysis and design plan for the remaining site improvements;
- Pre-project survey of existing system discharge into the Spanish Creek watershed;
- Purchase and installation of wastewater and system monitoring equipment;
- Post-project survey of improved system discharge into the Spanish Creek watershed;
- Notification to public of site improvement completion, including accompanying outreach and tourism activities.

PROJECT SCHEDULE

DETAILED PROJECT DELIVERABLES	TIMELINE
Aquaculture system analysis and design plans, and summary of	
results from existing system discharge survey in the Spanish Creek	
watershed	April – May 2008
Photo documentation and activity summaries: before, during and	
after ground work begins	June – September 2008
Installation of equipment	October - March 2009
Conduct outreach and tourism activities to promote public awareness	
of site improvement	April – June 2009
Final Report/Final Payment Request	July 31, 2009

PROJECT COSTS

PROJECT BUDGET CATEGORIES	TOTAL SNC FUNDING
Back-up facility generator	\$20,000
Equipment	\$39,750
Aquaculture consultant	\$5,000
Direct administrative expenses	\$5,250
GRAND TOTAL	\$70,000

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Letters of Support: • Trout Unlimited

- Kokanee Power

Recommendation:

Staff recommends funding the project at the requested amount of \$70,000.

Project Summary

Provide a summary (one-page maximum) that describes key elements of the project and states the total project cost.

Please type here: (SNC 070253) Feather River College (FRC) is one of the smallest community colleges in California. The 268-acre campus is surrounded by Plumas National Forest and hosts a variety of wildlife, including a resident deer herd. The campus provides a sanctuary for self discovery, study and outdoor activities. In addition to small class sizes and personalized attention, the campus includes stateof-the-art computer technology, a wild trout fish hatchery, and an equestrian center. Over the years, the FRC Hatchery Program has contributed to wildlife conservation by supplying thousands of brown and rainbow trout to State organizations such as Kokanee Power and Trout Unlimited. This request to the Sierra Nevada Conservancy addresses the site improvement needs of the FRC Hatchery, a program that will soon celebrate its 35th year of service dedicated to increasing native species and angling opportunities in public waters for the enjoyment of fishermen of all ages in Plumas County. The Feather River College Hatchery is in the process of developing a cutting-edge aquaculture system for the consistent production of high-quality fish. The system includes fish growout tanks, a commercial-scale hatchery and nursery, waste mitigation systems, fish processing systems and a research and development component. The wastewater mitigation system reduces wastewater discharged directly into the adjacent stream by 5,808 gallons per day. Waste-handling techniques include specialized tank design, biofiltration, clarification and ozonation to recirculate the water volume daily. Wastewater is isolated by rotary screen clarifiers in the fish growout facility, and then runs through a cone-bottom gravity separator and rotary screen clarifier. Solids are isolated, aerobically mineralized and stabilized and applied to an artificial constructed wetland. Runoff from the wetland, as well as effluent from the rotary screen clarifier, is transported to a hydroponics greenhouse for further purification and then ozonated for sterilization. Through this innovative approach to wastewater treatment, the hatchery will prevent and reduce the discharge of thousands of gallons of waste per year while saving operations dollars. This request for funding will provide for the balance of equipment needed for the modification of ponds and tanks at the hatchery site and provide an automated system to monitor and control critical parameters such as water temperature, dissolved oxygen, and water flow in ponds and tanks. This system has been designed to develop hatchery technology to rear large numbers of juvenile game fish, to evaluate the use of hatchery-reared animals, and to supplement or restore native populations. Project priorities include management of fish reproduction to mimic the genetic makeup of native populations and conducting stock enhancement in a responsible manner. Site improvements will increase productivity and improve the efficiency and operations at the hatchery while also lowering the production cost per fish.

The FRC Hatchery is in need of \$70,000 to complete this site improvement project.